

SEQUENCE LISTING

<110> University of Maryland Biotechnology Institute

<120> Assay for Perkinsus in Shellfish

<130> 0432.025

<140>

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<150> 08/900,117

<151> 1997-07-25

<150> 60/023,345

<151> 1996-07-26

<160> 18

<170> PatentIn Ver. 2.1

<210> 1

<211> 1150

<212> DNA

<213> Perkinsus marinus

<400> 1

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actagtgaac atagttata acattgtcca aggggtggag ggggatgcgc gaaatcgatg 180
tgcacgtttg gtcaaagatg ctcgcgaaag ctgcacatca atttcgcaca tggcgaaat 240
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attttactta aaattgacct ttttcgttgc gcagatttg ggtgggtatg ggtgacgcgg 480
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tgatgcaatc 1150

<210> 2
<211> 1550
<212> DNA
<213> Perkinsus sp.

<220>
<223> The nucleotide sequence of the NTS of rRNA of
P.andrewsi, isolated from Macoma balthica

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cacaattct caaattggac aacattggac aaaaattcac aacatacatt ggacaacagt 180
ggacaacgaa cccaaacccg acaacattgt ccagggggat aggggggtgaa aaagcagtgc 240
cgccaaagtc gaaagatgtc aagttggaaat gcgcctaaa ttgcattt gtgtaaatcc 300
gcaattttgc caatgtgcaa ttttgcattt gtgcattt gcaaatgtgc aattttgcca 360
atgtgcatt ttgcaaatgc gcaattttgc aaatccgcaa ttttgcattt gtgcattt 420
ggaaaatcac caaatgaaaaa tcgtccaaatgtc aatccgaaat ttttgcattt gtgcattt 480
gatccccctgg ttacagtggaaatgc gcaatattcg ctgtatttgc gatgttcgct 540
gttttggcaa attttgcatttgc tggccgggttcaatgc gcaatattcg ctgtatttgc 600
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cacacaattt tggccgggttcaatgc gcaatattcg caaatggac aaaaaagggt cgccacagt 840
caaattgcgc aaatttgcatttgc ttttgcatttgc tggccgggttcaatgc gcaatattcg 900
agcatcgattt tttataataa atatttgcatttgc ttttgcatttgc ttttgcatttgc 960
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ggaatcatgg gttttgttat tagtaccgc tcattgtggg aatgtcggtt ggttcaatata 1260
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<210> 3
<211> 1413
<212> DNA
<213> Perkinsus sp.

<220>
<223> The nucleotide sequence of the NTS of rRNA of
Perkinsus mackini, isolated from Mercenaria
mercenaria

<400> 3

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atcgtgttag tagtgcgac tcttggcggt aaccggaaaga ccggaaacttgcgatcta 1260
tttacgtccg taacacgtcc gtaaaacagga gatttcaaga atattgcaca ttttgcgtga 1320
tataatcgatg atcatctgtag cacgcttcga ctcttgcata tttgttaaac aaccgatatt 1380
cgggagctcg caaggcattgc aattgtatgc atc 1413

<210> 4

<211> 20

<212> DNA

<213> Perkinsus marinus

<220>

<223> Forward primer

<400> 4

cacttgtatt gtgaaggcacc

20

<210> 5

<211> 21

<212> DNA

<213> Perkinsus marinus

<220>

<223> Reverse primer

<400> 5
gtcatttgga gatgtcacca a

21

<210> 6
<211> 20
<212> DNA
<213> *Perkinsus marinus*

<220>
<223> Forward primer

<400> 6
atgctagccc atagaacagt

20

<210> 7
<211> 20
<212> DNA
<213> *Perkinsus marinus*

<220>
<223> Reverse primer

<400> 7
atgctagccc acatcacagc

20

<210> 8
<211> 22
<212> DNA
<213> *Perkinsus atlanticus*

<220>
<223> Forward primer

<400> 8
atgctatggc tggttgcggc cc

22

<210> 9
<211> 20
<212> DNA
<213> *Perkinsus atlanticus*

<220>
<223> Reverse primer

<400> 9
gtagcaagcc gtagaaacagc

20

<210> 10
<211> 24
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> NTS7 forward primer for *Perkinsus andrewsi*

<400> 10
aagtcgaatt ggaggcggtgg tgac

24

<210> 11
<211> 20
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> NTS6 reverse primer for *Perkinsus andrewsi*

<400> 11
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20

<210> 12
<211> 19
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> Generic forward primer PER1 for *P.marinus*,
P.atlanticus and *P.andrewsi*

<400> 12
tagtacccgc tcattgtgg

19

<210> 13
<211> 17
<212> DNA
<213> *Perkinsus* sp.

<220>
<223> Generic reverse PER2 primer for *P. marinus*, *P.*

atlanticus and P. andrewsi

<400> 13

tgcaatgctt gcgagct

17

<210> 14

<211> 22

<212> DNA

<213> Perkinsus sp.

<220>

<223> Forward SSU3F primer for P. andrewsi

<400> 14

agttggattt ctgccttggg cg

22

<210> 15

<211> 22

<212> DNA

<213> Perkinsus sp.

<220>

<223> Forward SSU4F primer for P. andrewsi

<400> 15

accaggtcca gacataggaa gg

22

<210> 16

<211> 712

<212> DNA

<213> Perkinsus sp.

<220>

<223> A nucleotide sequence of the ITS1-5.8. S ITS2
regions of P. andrewsi

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ccaattgtac tagtctaaag tatccaatat cctttggat tttggtattt caaaacgaaa 180
ttcccaaactc tcaacgatgg atgcctcggc tcgagaatcg atgaaggacg cagcgaagtg 240
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caaagggat ttatcctctt tgtacataca tatcagtgtc gctcttcttc ccgataacaa 360
catttgttg attacaatc aacattatgc tttgtatccc gcttggattc ctattattggg 420
atccgctgtg tgcatgttgc gacacaggcg catatatttgc caaggctata atactactgt 480

actgtagccc cttcgcaaga aggactgcgc tagtgagtat ctttggatgc tcgcgaactc 540
gactgtgtg tggttgattc cgtttcctc gatcacgcga ttcatcgctt caacgcatta 600
tgtcaaattt gatgaatgca gagagttgtt tatgaattac gogatcgctt tggctcaga 660
atcgttacta tagcacgctt gtcggttgc aacctggcaa tatgtcatca tt 712

<210> 17

<211> 1808

<212> DNA

<213> *Perkinsus* sp.

<220>

<223> A nucleotide sequence of the SSU rRNA of
P.andrewsi

<400> 17

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agtataagct ttaaacggcg aaactgcgaa tggctcatta aaacagttat agtttatttg 120
gtgatcgatt actatggta taaccgttagt aattcttagag ctaatacatg cgtaaggcc 180
cgacttcgga agggctgcgt ttatttagata cagaaccaac ctagctccgc ctagtccttg 240
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gtgagctgatc cggactgcga ttagttcagt ttctgttctt ttcgcggaa gttctgcaaa 1740
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gatcattc 1808

<210> 18
<211> 1147
<212> DNA
<213> *Perkinsus atlanticus*

<220>
<223> A nucleotide sequence of the NTS of rRNA of *P. atlanticus*

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atgttatccc agctcaacaa cgagcaacag tgctatggca agtagtccac tagagagcca 120
agtgcacaat ctctacaaca ttgtccaagg gggaaagggg ggccgcgcgaa gttgacctgc 180
agcagaggga aaagatgctg agtttgctg caccccaact ttgcgcactt ggcgaagttg 240
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tgcaatc

1147